from the initial operation of the WCS transmitter or within one year from any subsequent power increases at the WCS station.

(b) Resolution of the complaint shall be at no cost to the complainant.

(c) Two or more WCS licensees collocating their antennas on the same tower shall assume shared responsibility for remedying interference complaints within the area determined by paragraph (a)(4) of this section unless an offending station can be readily determined and then that station shall assume full financial responsibility.

(d) If the WCS licensee cannot otherwise eliminate interference caused to MDS/ITFS reception, then that licensee must cease operations from the offending WCS facility.

(e) At least 30 days prior to commencing operations from any new WCS transmission site or with increased power from any existing WCS transmission site, a WCS licensee shall notify all MDS/ITFS licensees in or through whose licensed service area they intend to operate of the technical parameters of the WCS transmission facility. WCS and MDS/ITFS licensees are expected to coordinate voluntarily and in good faith to avoid interference problems and to allow the greates operational flexibility in each other's operations.

[62 FR 16498, Apr. 7, 1997]

§ 27.59 Environmental requirements.

WCS operations that may have a significant environmental impact as defined by §§ 1.1301 through 1.1319 of this chapter, must file an FCC Form 600 and supply specific technical information about their proposed site prior to construction of such site as well as an environmental assessment (EA) in accordance with §§ 1.1301 through 1.1319 of this chapter. Such application will be placed on public notice in accordance with § 27.316 and may not be constructed or operated prior to a finding of no significant impact (FONSI) being issued and placed on public notice by the FCC.

§ 27.61 Quiet zones.

Quiet zones are those areas where it is necessary to restrict radiation so as to minimize possible impact on the operations of radio astronomy or other facilities that are highly sensitive to interference. The areas involved and procedures required are as follows:

(a) *NRAO, NRRO.* The requirements of this paragraph are intended to minimize possible interference at the National Radio Astronomy Observatory site located at Green Bank, Pocahontas County, West Virginia, and at the Naval Radio Research Observatory site at Sugar Grove, Pendleton County, West Virginia. WCS licensees planning to construct and operate a new or modified WCS station at a permanent fixed location within the area bounded by N.39°15′ on the north, W.78°30′ on the east, N.37°30′ on the south, and W.80°30′ on the west must notify the Director, National Radio Astronomy Observatory, Post Office Box No. 2, Green Bank, WV 24944, in writing, of the technical details of the proposed operation. The notification must include the geographical coordinates of the antenna location, the antenna height, antenna directivity (if any), the channel, the emission type and power.

(b) *Table Mountain.* The requirements of this paragraph are intended to minimize possible interference at the Table Mountain Radio Receiving Zone of the Research Laboratories of the U.S. Department of Commerce located in Boulder County, Colorado.

(1) WCS licensees planning to construct and operate a new or modified WCS station at a permanent fixed location in the vicinity of Boulder County, Colorado are advised to give consideration, prior to filing applications, to the need to protect the Table Mountain Radio Receiving Zone from interference. To prevent degradation of the present ambient radio signal level at the site, the U.S. Department of Commerce seeks to ensure that the field strengths of any radiated signals (excluding reflected signals) received on this 1800 acre site (in the vicinity of coordinates 40°07′50″ North Latitude, 105°14′40″ West Longitude) resulting from new assignments (other than mobile stations) or from the modification or relocation of existing facilities do not exceed the values given in Table C–3.

TABLE C–3—FIELD STRENGTH LIMITS FOR TABLE MOUNTAIN

Frequency range	Field strength	Power flux density
890 to 3000 MHz ..	1 mV/m	-85.8 dBW/m^2

Note: Equivalent values of power flux density are calculated assuming free space characteristic impedance of 376.7Ω (120πΩ). (120).

(2) Advance consultation is recommended, particularly for WCS licensees that have no reliable data to indicate whether the field strength or power flux density figures in the above table would be exceeded by their proposed radio facilities. In general, coordination is recommended for:

(i) Stations located within 2.4 kilometers (1.5 miles);

(ii) Stations located within 4.8 kilometers (3 miles) transmitting with 50 watts or more effective radiated power (ERP) in the primary plane of polarization in the azimuthal direction of the Table Mountain Radio Receiving Zone;

(iii) Stations located within 16 kilometers (10 miles) transmitting with 1 kW or more ERP in the primary plane of polarization in the azimuthal direction of Table Mountain Radio Receiving Zone;

(iv) Stations located within 80 kilometers (50 miles) transmitting with 25 kW or more ERP in the primary plane of polarization in the azimuthal direction of Table Mountain Receiving Zone.

(3) WCS licensees are urged to communicate with the Radio Frequency Management Coordinator, U.S. Department of Commerce, Research Support Services NOAAR/E5X2, Boulder Laboratories, Boulder, CO 80303; telephone (303) 497–6548, in advance of construction and operation of such facilities.

(c) *Federal Communications Commission protected field offices.* The requirements of this paragraph are intended to minimize possible interference to FCC monitoring activities.

(1) WCS licensees planning to construct and operate a new or modified WCS station at a permanent fixed location in the vicinity of an FCC protected field office are advised to give consideration to the need to avoid interfering with the monitoring activities of that office. FCC protected field offices are listed in §0.121 of this chapter.

(2) Applications for stations (except mobile stations) that could produce on any channel a direct wave fundamental field strength of greater than 10 mV/m (−65.8 dBW/m^2 power flux density assuming a free space characteristic impedance of 120πΩ) in the authorized bandwidth at the protected field office must be examined by WCS licensees to determine the potential for interference with monitoring activities.

(3) In the event that the calculated field strength exceeds 10 mV/m at the protected field office site, or if there is any question whether field strength levels might exceed that level, advance consultation with the FCC to discuss possible measures to avoid interference to monitoring activities should be considered. WCS licensees may communicate with: Chief, Compliance and Information Bureau, Federal Communications Commission, Washington, DC 20554.

(4) Advance consultation is recommended for WCS licensees that have no reliable data to indicate whether the field strength or power flux density figure indicated would be exceeded by their proposed radio facilities. In general, coordination is recommended for:

(i) Stations located within 2.4 kilometers (1.5 miles);

(ii) Stations located within 4.8 kilometers (3 miles) with 50 watts or more average effective radiated power (ERP) in the primary plane of polarization in the azimuthal direction of the protected field offices.

(iii) Stations located within 16 kilometers (10 miles) with 1 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the protected field office;

(iv) Stations located within 80 kilometers (50 miles) with 25 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the protected field office;

(5) Advance coordination for stations transmitting on channels above 1000 MHz is recommended only if the proposed station is in the vicinity of a protected field office designated as a satellite monitoring facility in §0.121 of this chapter.

(6) The FCC will not screen applications to determine whether advance consultation has taken place. However,

such consultation may serve to avoid the need for later modification of the authorizations of stations that interfere with monitoring activities at protected field offices.

§ 27.63 Disturbance of AM broadcast station antenna patterns.

WCS licensees that construct or modify towers in the immediate vicinity of AM broadcast stations are responsible for measures necessary to correct disturbance of the AM station antenna pattern which causes operation outside of the radiation parameters specified by the FCC for the AM station, if the disturbance occurred as a result of such construction or modification.

(a) *Non-directional AM stations.* If tower construction or modification is planned within 1 kilometer (0.6 mile) of a non-directional AM broadcast station tower, the WCS licensee must notify the licensee of the AM broadcast station in advance of the planned construction or modification. Measurements must be made to determine whether the construction or modification would affect the AM station antenna pattern. The WCS licensee is responsible for the installation and continued maintenance of any detuning apparatus necessary to restore proper non-directional performance of the AM station tower.

(b) *Directional AM stations.* If tower construction or modification is planned within 3 kilometers (1.9 miles) of a directional AM broadcast station array, the WCS licensee must notify the licensee of the AM broadcast station in advance of the planned construction or modification. Measurements must be made to determine whether the construction or modification would affect the AM station antenna pattern. The WCS licensee is responsible for the installation and continued maintenance of any detuning apparatus necessary to restore proper performance of the AM station array.

§ 27.64 Protection from interference.

Wireless Communications Service (WCS) stations operating in full accordance with applicable FCC rules and the terms and conditions of their authorizations are normally considered to be non-interfering. If the FCC determines, however, that interference which significantly interrupts or degrades a radio service is being caused, it may, after notice and an opportunity for a hearing, require modifications to any WCS station as necessary to eliminate such interference.

(a) *Failure to operate as authorized.* Any licensee causing interference to the service of other stations by failing to operate its station in full accordance with its authorization and applicable FCC rules shall discontinue all transmissions, except those necessary for the immediate safety of life or property, until it can bring its station into full compliance with the authorization and rules.

(b) *Intermodulation interference.* Licensees should attempt to resolve such interference by technical means.

(c) *Situations in which no protection is afforded.* Except as provided elsewhere in this part, no protection from interference is afforded in the following situations:

(1) *Interference to base receivers from base or fixed transmitters.* Licensees should attempt to resolve such interference by technical means or operating arrangements.

(2) *Interference to mobile receivers from mobile transmitters.* No protection is provided against mobile-to-mobile interference.

(3) *Interference to base receivers from mobile transmitters.* No protection is provided against mobile-to-base interference.

(4) *Interference to fixed stations.* Licensees should attempt to resolve such interference by technical means or operating arrangements.

(5) *Anomalous or infrequent propagation modes.* No protection is provided against interference caused by tropospheric and ionospheric propagation of signals.

Subpart D—Competitive Bidding Procedures for WCS

§ 27.201 WCS subject to competitive bidding.

Mutually exclusive initial applications to provide WCS service are subject to competitive bidding procedures.